DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-002662 Address: 333 Burma Road **Date Inspected:** 20-May-2008

City: Oakland, CA 94607

OSM Arrival Time: 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1700 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: Sun Wei **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS:** Yes No N/A **Delayed / Cancelled:**

Bridge No: 34-0006 **Component:** OBG

Summary of Items Observed:

The Quality Assurance (QA) Inspector Gregory Bertlesman arrived on site at the Zhenhua Port Machinery Company facility on Changxing island, China to periodically monitor welding and Quality Control functions. While on site the Quality Assurance Inspector observed and/or discovered the following.

Production Monitoring Test

The Quality Assurance Inspector monitored the Production Monitoring Tests (PMT) and production welding for the OBG Deck Panels U-rib welding. The weld joint is a single bevel Partial Joint Penetration (PJP) weld that joins the U-rib to the deck plate. The Production Monitoring Test (PMT) is performed prior to the production of the Deck Panels (DP). PMT #1 consists of (3) ribs totaling (6) weld joints, numbered 1 thru 6. Welding was performed on

Gantry 1 and represents production for Deck Panels DP-604-001 and DP-569-001. Welding was performed in accordance with welding procedure specification WPS-B-T-2342 (Dual Process GMAW root pass SAW fill and cover pass). The parameters and welders were recorded in an on site log for future review.

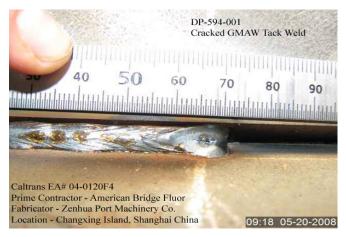
ZPMC Quality Control performed visual inspection of the GMAW weld pass and the subsequent SAW weld pass. ZPMC QC noted the welds as visually compliant. ZPMC QC also performed Ultrasonic Testing of the 500 millimeters selected of each weld and noted them as compliant. The Quality Assurance Inspector performed visual verification the GMAW weld pass and the SAW weld pass and noted them as compliant with contract documents. Upon completion of the visual review the Quality Assurance Inspector selected the areas of the PMT for macro etch samples.

WELDING INSPECTION REPORT

(Continued Page 2 of 2)

The Quality Assurance Inspector observed numerous cracked tack welds in the partial joint penetration to deck plate connection on deck panel DP-594-001. The tack welders who performed the welding were Liu Xia Qing, welder identification number 059393, and Tang Liang, welder identification number 062305. ABF representative Steve Lawton was informed by Quality Assurance Inspector David McClary. Below are digital Photographs illustrating the cracks.





Summary of Conversations:

As stated in the contents of the above report.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Patrick Lowry (916) 227-5719, who represents the Office of Structural Materials for your project.

Inspected By:	Bertlesman,Greg	Quality Assurance Inspector
Reviewed By:	Cuellar,Robert	QA Reviewer